

# **Report of the Evaluation of the Democratization of ICT Content for Africa Pilot Project International Development Research Centre (IDRC) / the Centre for Advanced Studies of African Society (CASAS)**

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# **Report of the Evaluation of the Democratization of ICT Content for Africa Pilot Project International Development Research Centre (IDRC) / the Centre for Advanced Studies of African Society (CASAS)**

## ***Phase I***

### **Introduction**

The Acacia Initiative pioneered under the auspices of the IDRC has been making progress and providing some lessons for future expansion and development. The Uganda telecentres at Buwama, Nabweru and Nakaseke provide prime examples of such work. These telecentres have been operating as pilot cases from which lessons for replication and expansion can be considered.

From IDRC documentation and reports on the experience of these telecentres, it has been found that the telecentres tend, in the operations, to be societally specific and tend to focus on the needs of the communities in which they are located. In practice, their mode of operation is to provide public information with revenue generation to back this up. Also importantly, the emerging wisdom is that, these telecentres need to provide content and information, which engages the developmental issues of the communities in which they are located.

During the June 22<sup>nd</sup>, 2000 Workshop convened by the IDRC at The Acacia Secretariat to consider issues and modalities attendant on the development of content materials for the telecentres, the following points were identified as relevant for such considerations:

1. establish the information needs of community users for all telecentres
2. prioritise the information needs and note those that specifically cut across all telecentres
3. establish how to develop content

4. identify the possible sources of information
5. examine the forms and modes for information dissemination
6. design a work-plan to guide activities in the content development process

It was decided that, the issue of content is crucial for further development and consolidation of the Acacia Initiative. It is this issue and its address which will make the difference between Acacia's role as a service institution for activities like faxing, photocopying and e-mailing and the more substantive activities of providing hard, developmentally focused and socially relevant materials affecting the mode of livelihood and existential conditions of mass society.

Additionally, it is important to note that the overwhelming majorities in both urban and rural Africa are largely, tradition-bound, African language speaking communities, with a varying, but high levels of illiteracy. Content materials will serve to empower mass society by providing needed information. But such materials are also crucial for enhancing literacy skills and converting scientific language and rationalities into systems of communication and language directly understandable to the great majority of African people.

#### **The CASAS Linkage**

CASAS has been involved with work in the area of African languages, more specifically the clustering of African languages on the basis of mutual intelligibility of 85% or more. Base-line work in this area for Uganda and adjacent countries has already been done by CASAS research network members in the region.

CASAS has developed guidelines for the harmonization and standardization of African languages with specific reference to the revision of orthographic conventions, which open the way to the identification of large speech communities which can access shared written forms. This immediately on the economies of scale enable the

viability of the production of content materials like books, computer diskettes, videos and CD Roms. CASAS was on the basis of its track record selected by the IDRC Programme Officer (Nairobi), Ms Edith Adera, to initiate work on the development of content material.

In this instance the work envisaged involved the production of a CD Rom in specific content areas,

- a) soil fertility - agro-chemical use, agroforestry, composting etc. etc.
- b) pest control
- c) HIV /AIDS

The CD Rom was to be rendered in African languages in line with CASAS's innovative approaches on the production of materials in African languages.

#### **Periodization of Work (Content Development - Pilot Work)**

- 1) *Networking, Preparation and Collation of Data (Mid-October - Mid-November 2000)*

This phase of the work involved the identification of source materials, source institutions and the selection of relevant and pertinent material, which would eventually go into the production of the CD Roms. This data was to be selected and collated, ready for translation and typesetting within the space of a month. As soon as the data had been selected and collated, the data was to be subjected to expert review and vetting. A one-day workshop was envisaged.

- 2) *Translation and Typesetting*

- a) *Translators workshop (3<sup>rd</sup> week November)*

This Workshop brought together the translators for the work. There were four composite groups of translators working on the Kara group of languages, the Luo group of languages, the Eastern Inter-lacustrine languages and the Western Inter-lacustrine languages.

The original plan was that, the translators were to be taken through the requisite orthographic conventions, necessary for the production of the work. The work schedule was to be discussed with the translators so that the deadlines were understood and agreed to. In the event, to meet IDRC deadlines and limited resources, the work moved into the translation stage without the harmonization of the orthographies of the speech forms in the four clusters.

*b) Translation process (4<sup>th</sup> week November - end of January 2001)*

The translation process, which was envisaged to start immediately after the translators workshop, was expected to continue till the end of January 2001. This period was to include a vetting process of the materials, and peer review of the status of the translations.

*c) Typesetting and CD Rom production (1<sup>st</sup> February - 21<sup>st</sup> February 2001)*

The typesetting and CD Rom production were expected hopefully to be done in February by an expert company in Cape Town.

*d) Product testing (21<sup>st</sup> February - 21<sup>st</sup> March)*

The CD Roms were to be distributed to the telecentres and tested for consumer reaction. This was to take place from late-February to late-March.

*3) Workshop (with like-minded donors (mid-April)*

As suggested by the IDRC, about mid-April or early-May a brainstorming workshop was to take place with like-minded donors, development/research agencies and the private sector to share the materials developed (the idea is to have a story to tell) and to brainstorm on a bigger pilot which could cover other areas of interest and pull in various partners.

### **Coordination**

As suggested by the IDRC, CASAS would take the lead and work with the suggested names/ contacts at CAB International and ICIPE for the first stage of the work. CASAS would consult on a continuous basis with the relevant IDRC Programme Officer for the Acacia Project.

After almost a year's work, in January 2002, CASAS submitted a terminal report for the work of developing the pilot CD Rom. The report was as follows:

We are happy to report that the above work has been brought to a successful conclusion. The background to this is as follows. After a series of discussions and consultations, in December 2000 the IDRC approved a grant to CASAS to undertake to network, prepare and collate information in three content areas of:

1. Soil fertility
2. Pest control
3. HIV/AIDS

It was envisaged that in this endeavour CASAS would cooperate with ICIPE (Pest control), CAB International (Soil fertility) and UNAIDS (HIV/AIDS) in order to collect the most appropriate materials for the work. The objective was to then render the collected materials into forms which would be easily understood by grassroots society in the region. CASAS decided to add to the work an extra complement on the Neem tree so that in the end the CD Rom which was produced included materials on the following topics:

1. HIV/AIDS
2. Maize/Pest Control
3. Improving Soil Fertility
4. The Neem Tree

The understanding was further that these materials would be translated into the key languages of the region, with Uganda as the centre. The translations were supposed to take into account CASAS' approach to the harmonization of speech forms on the basis of mutual intelligibility of 85% or more. The rationale being that at that level of mutual intelligibility it is possible to use orthographic conventions/spelling which would unite dialects within a given cluster of mutually intelligible speech forms. This would represent a major breakthrough in the rendering of literacy enhancing materials and knowledge empowering data for grassroots societies, and pioneer a new approach to development in the region. The four clusters that were considered were the following:

#### **Selected Speech Forms**

##### ***Luo Cluster***

- Acholi
- Lango

#### **Phylo-Genetic Affiliation**

- Acholi
- Alur
- Kuman
- Dhopadhola
- Lango
- Luo
- Jur
- Anyuak
- Shilluk

##### ***Eastern Lacustrine***

- Luganda
- Lusoga

##### ***Eastern Lacustrine***

- Luganda
- Lusoga
- Lunyole
- Lusamia
- Lugwe
- Lugwere
- Lugishu
- Lukenyi

***RunyaKitara Cluster***

- Runyankore
- Rukiga
- Runyoro
- Rutoro

***Kitara Cluster***

- Runyankore
- Rukiga
- Runyoro
- Rutoro
- Ruhaya
- Ruhema
- Rukerewe

***Ateso / Karamojong Cluster***

- Teso
- Karamojong

***Teso/Karamojong Cluster***

- Teso
- Karamojong
- Dodoth
- Matheniko
- Pian
- Bokora
- Pokot
- Jie
- Tepeth
- Labwor
- Nyapei

What was recognised was that although speech forms within a cluster (phylo-genetic) may enjoy mutual intelligibility, the degree of intelligibility may not be even throughout the cluster. Therefore it may be necessary to develop orthographies around the most populous speech forms within a given cluster. Indeed, this was the case for all four clusters (see table above). This was also the most realistic way forward on account of the fact that, a harmonization process did not precede the translations.

**Record**

As a first step, IDRC suggested that the project coordinator should visit the Uganda Telecentres in order to familiarize himself with the set-up.



This was done and a report of this familiarization tour was made at the IDRC Nairobi Office late 2000. Visits were made to CAB International (CABI) and International Centre of Insect Physiology and Ecology (ICIPE) to investigate the scope for cooperation with these institutions. CABI suggested the enlistment and cooperation of International Center for Research in Agroforestry (ICRAF).

Subsequently, the coordinator was invited by Dr Eva Rathgeber (IDRC Director – Nairobi) to an IDRC/African Ministerial meeting in Kampala where amongst other things the development of the envisaged CD Rom content materials was discussed with a broad range of interested parties.

On the 20<sup>th</sup> of February, 2001 a joint partnership meeting was held at ICIPE with the following agenda:

- An Overview of the Project and Progress to-date
- Available content from ICIPE - Integrated Pest Management
- Available materials from CABI - Soil Fertility
- Modalities for collaboration
- Field testing of developed materials
- Discussions on proposed partnership workshop
- Virtual tour of ICIPE materials relevant to the Project

The following people participated in this meeting: Hilda Munyua, Annalee Mengech, Irene Ogendo, Adele Ngi-song, Charles Omwega, Glenn Segueira and Yun Long Xia. The meeting agreed that within 6 weeks the relevant materials that had been selected would be made available to CASAS. Unfortunately these materials were delayed. The last bit of what was expected arrived during the first week of August 2001.

CASAS immediately convened the meeting in Kampala on the 18<sup>th</sup> August 2001 with the linguists who were to work on the translations of the texts, and agreed on a timeframe of 6 weeks for the completion of

the translations. In addition, CASAS had extensive discussions with Professional Vision Group (PVG) in Cape Town. This group subsequently worked with CASAS to develop the CD Rom. It was hoped that within 5 weeks of the completion of the translations, it would be possible to bring the work on the production of CD Rom to a conclusion. In the event, the processes took a bit longer than expected. CASAS had to bring in the linguists and translators to refine their work and liaise with Professional Vision Group (PVG) in Cape Town in order to finalize the product. Richard Sorrell and Nikki Pike undertook work on this product. This was done in the middle of December 2001. After the Christmas break, work continued on polishing up the product. Work was finally completed in the second week of January.

### **Lessons in Phase I**

The two most important lessons that were noted in the process of developing the pilot CD Rom were that:

- 1a. It is important to see the linguistic aspects of the work as technically the most complex in the process.
  - b. A considerable amount of effort needs to be put into translating technical scientific terms into African languages. This needs a great deal of care.
  - c. The selection and collection of content material, per se, is not the most tricky aspect of the work.
- 
- 2a. In order to take the maximum advantage out of the product, voice injections into the product need to be kept to a minimum, so that the users are forced to practice and improve their literacy/reading skills as they at the same time acquire crucial knowledge and information provided by the CD Rom.
  - b. The need to avoid voice injections is also underscored by the fact that many speech forms within a cluster of mutually intelligible dialects have often fairly distinct phonetical and phonological characteristics which people identify with ethnicity. The reaction

of the user will then be to say ‘but, this is not in my language’. If the presentation is overwhelmingly textual and can be read across as many dialectical boundaries as possible within a cluster of mutually intelligible speech forms, using the CASAS approach to orthographic harmonization, this makes better economic, social and cultural sense. Very importantly, it also enhances the literacy skills of the user.

## ***Phase II***

### **Post-Pilot CD Rom Production Activity: Testing and Improvement of Product**

During the month of February 2002, CASAS and the IDRC Acacia office in Nairobi were involved in a series of discussions on how to proceed further with the work. CASAS agreed to place the CD Rom work on its website as ‘work in progress’. Furthermore, CASAS agreed to make available to the Acacia Nairobi office 20 of the 40 CD Roms for distribution and pilot testing. It was agreed that the pilot testing would therefore be the first major activity of Phase II (a 12 month activity).

### **Aims and Objectives**

The understanding was that, the aim of Phase II was to fine-tune and perfect the CD Rom for the identified audience i.e. grassroots society, both rural and peri-urban, as a means to empowering them with information which could lead to positive behaviour changes and/or valuable organizations. It was agreed that, consequently, we needed to:

- i) pilot test CD Rom
- ii) carefully identify the target audience for the information on the CD Rom
- iii) reduce and/or simplify the technical scientific language
- iv) edit the CD Rom to reflect the changes required following the pilot testing.

In order to achieve the above aims and objectives, the following sequence and time-lines were envisaged.

### **Timeframe**

1. Phase II to commence with an exercise in evaluation/pilot testing CD Rom at 3 Telecentres - Nabweru, Buwama and Nakaseke, and the assessment of the CD Rom by Anti-AIDS bodies e.g. National AIDS Council, Uganda, Medicinal/Environmental NGOs e.g. ELCI, Nairobi, etc. (April, May and June).
2. After the above exercise had been completed, a meeting was to be convened for writers/editors in all the languages to feed the findings that have been made, into a revised product (July).
3. During the month of August a reassessment of the revised product (Rapid Appraisal) was to be undertaken (August).
4. After the above (3) activity, the final product was to be made after further revision of the text graphics for the CD Rom and the production of an initial number of 250 copies (Sept/Oct).
5. The final stage of Phase II would involve a public presentation, launch and demonstration at a public gathering to serve as a call for other donors to join a continental drive for web/ICT content production for popular access (Nov. 2002).

### **Pilot Test/Research**

Four Research Assistants, who are translators, were to be given a sociological research instrument to administer at the Telecentres and in the areas around them in order to elicit data on the receptivity of the population to the CD Rom content quality. The project leader would analyse the data and present the data in a written form, which will be discussed at the writers and editors meeting which will feed the findings into a revised product. The managers of the Telecentres were to be drawn into the research process and interviewed to provide information on uptake of the content materials.

The four research assistants/translators involved in the project were: Simon Peter Ongodia, Gilbert Gumoshabe, Saudah Namyalo and Godman Okonye. Two of them had been involved in the original translations of the text.

### **Research Design and Methodology**

During May 2002, CASAS developed an instrument to collect data for an evaluation of the Pilot CD Rom and its impact, bearing in mind the issues which CASAS and the IDRC had agreed should be looked at in the evaluation exercise. A questionnaire was developed for this purpose.

In addition a set of questions were developed, earmarked for the NGOs, which have related interests to the work of the Acacia Initiative and Managers of the Telecentres in Uganda. This schedule was open-ended, unstructured and was basically a list of questions for which the evaluator sought clarification on a number of basic issues. More importantly, the evaluator needed to assess the scope for cooperation with local NGOs in the development of content materials.

The questionnaire, which was the principal research instrument for the study was directed at users, the target audience for the information on the CD Rom. Some of the questions were intended to provide us with insights which will help the revision, editing and improvement of the content material on the CD Rom. This questionnaire was structured and was intended to be administered by research assistants/translators who have been working with CASAS on this project.

While the sampling was not constructed for representativeness, it was envisaged to be administered on the size of a two-day user group per Telecentre. It was however very well understood that attendance varies from one Telecentre to the next, and from day to day. It was expected that the size of the total universe for the three Telecentres will bring out a wide and representative spectrum of perceptions on the content materials.

In addition to the questionnaire, four linguists, each specialised on the language clusters represented on the CD Rom, and the Acacia coordinator in Uganda were identified and requested to give their candid impressions of the contents of the CD Rom. The results of their findings have also been appended herewith (*Expert Assessment of Content Materials*).

The plan was that on the basis of the findings the evaluator made during the research/study/evaluation, immediately on return to the CASAS headquarters, the corrections that can be made to the content materials as presented on the website will be effected.

In addition to the above, the website designer (Mr Baziel Barends) had identified a number of issues and questions which needed to be clarified by the translators, and the responses to which were intended for the revision and improvement of the content materials on the website.

According to the work plan, two full days were to be spent by the research assistants at the various Telecentres administering questionnaires and collecting other data which may be useful for the work. The project Director was to spend also three days in the field supervising and assessing the quality of the data that was being obtained. In addition, the project Director/evaluator was to spend time interviewing leading figures in the NGO world of Uganda and the Telecentre Managers as indicated above. A list of the identified NGOs was obtained from the Acacia Initiative coordinator in Uganda (Rita Mijumbi). The preparations for this exercise was also facilitated by Ms. Patricia Litho. Dr. Z.M. Nyiira was the principal person in Uganda whose good offices oversaw the whole exercise. From the IDRC office in Nairobi Ms. Gladys Githaiga made all the initial contacts and prepared the ground for the linkage with related persons in Uganda. Ms. Edith Adera and Ms. Florence Etta were the key people in the Nairobi IDRC office who master-minded the whole process.

The data collected in all these instances were to be processed by the evaluator and written up as the Evaluation Report.

### **Data Collection and Data Analysis**

Towards the end of June 2002 the evaluator went to Uganda to initiate the process of data collection. Two initial rounds of meetings were undertaken to prepare the research assistants for the work to be done. The questionnaires were explained, the techniques for effective data collection were clarified, and the project evaluator made a round of visits with the research assistants to the Telecentres.

The Managers and other staff at the Telecentres were exhaustively interviewed as planned. The research assistants started work with administering the questionnaires. It became quickly clear that much more time would need to be spent on data collection via the questionnaires. The research assistants were assigned to different Telecentres and given a timeframe of four weeks to complete the collection of the data. The completed questionnaires were to be forwarded to the CASAS office after the four-week period. This was accomplished, but with about a week's delay.

The evaluator undertook interviews as scheduled with the NGO Heads and collected materials which would assist in the conceptualisation and planning of post-evaluation initiatives.

The data/completed questionnaires arrived on the 8<sup>th</sup> August 2002 and analysis of the data commenced the following week. After this, the evaluator proceeded to sift out the findings from the results and tables available. The write-up of the report was completed in mid-September 2002.

### **Revision of Content Materials**

On the basis of the initial findings made in the field and collected through the work of the research assistants, plus the responses obtained

to the questions raised by the website designer, editing and revision of the content materials were started by the website designer. This process took about 3 weeks to complete.

### **Findings and Observations**

The findings emerging out of the research exercise were revealing, and should go a long way towards helping to shape subsequent work on the development of content materials.

### **Survey Findings**

Over 50% of the total sample was drawn from Nakaseke. This was obviously the most active of the three Telecentres. The age profile showed a preponderance of respondents between the ages of 0 – 35 years. Indeed, 58% of the respondents fell into this category. Only 5.5% were above 65 years and all of them were from Nakaseke. (*See Table 1*)

**Age (Question 2)**

	0-25 years	26-35 years	36-45 years	46-55 years	56-65 years	65+ years
Nabweru	4	3	2	0	0	0
Nakaseke	4	4	3	3	1	4
Buwama	3	3	0	1	1	0
<b>TOTAL</b>	<b>11</b>	<b>10</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>4</b>

**Table 1**

The occupational range of the respondents is provided in Table 2. From this, it can be seen that the largest group of respondents were made up of the farmer/peasant/agriculturalist category and again here Nakaseke showed a clear preponderance of this group. Indeed, 86.6% of the respondents in Nakaseke were from the farmer/peasant/ agriculturalist group. The next prominent occupational group was the teacher category who were fairly evenly spread in the samples from the three Telecentres.



**Occupation (Question 3)**

	Nabweru	Nakaseke	Buwama	<b>TOTAL</b>
Student	2	0	1	<b>3</b>
Cashier	1	0	0	<b>1</b>
ICT Trainer	1	0	0	<b>1</b>
Veterinary Officer	1	0	0	<b>1</b>
Teacher	2	3	2	<b>7</b>
Farmer/Peasant/ Agriculturalist	2	13	0	<b>15</b>
Lab Assistant	0	1	0	<b>1</b>
Information Officer	0	1	0	<b>1</b>
Librarian	0	1	0	<b>1</b>
Housewife	0	0	1	<b>1</b>
Health Worker	0	0	2	<b>2</b>
Pastor	0	0	1	<b>1</b>
Secretary	0	0	1	<b>1</b>

**Table 2**

Of the wide variety of occupational types who were interviewed, the two most prominent were the teacher group and the farmer/peasant/agriculturalist group. Together this group formed 61% of the universe. (*See Table 2*)

63.9% of the total sample were made up of females. Again, they were largely drawn from Nakaseke where the females formed 73.6% of the Nakaseke sample. For the other two Telecentres the balance between male and female was even.

The enthusiasm and activity of females was noticeable at all three Telecentres, but particularly so in Nakaseke, where the research team experienced the most enthusiastic reception during the study. (See Table 3)

**Sex (Question 4)**

	Male	Female
Nabweru	4	5
Nakaseke	5	14
Buwama	4	4
<b>TOTAL</b>	<b>13</b>	<b>23</b>

**Table 3**

Noticeably 91.6% of the sample from the three sites were made up of respondents whose home language was either Luganda or Lusoga. In actual fact they were almost overwhelmingly Baganda. This preponderance of Luganda/Lusoga speakers is on account of the fact that the three Telecentres were located in an area of the country which was predominantly made up of Baganda. Interestingly, only 2 respondents, 1 each from Nabweru and Nakaseke were from the Runyakitara language cluster. Obviously, this ethno-linguistic characteristic of the profile of respondents implies that Telecentres would need to be extended to other areas of the country so that one is not accused of providing useful services to a particular language group. (See Table 4).

**Which is your home language (tick appropriate box) (Question 5)**

	Acholi/ Lango	Luganda/ Lusoga	Ateso/ Karimojong	Runyakitara	Other
Nabweru	0	8	0	1	0
Nakaseke	0	18	0	1	0
Buwama	0	7	0	0	1
<b>TOTAL</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>2</b>	<b>1</b>

**Table 4**

72.2% of the total universe indicated that they were aware of the content material on the CASAS website. The distribution appeared to be fairly even.

**Are you aware of the CD Rom on the CASAS website? (Question 6a)**

	Yes	No
Nabweru	8	1
Nakaseke	10	8
Buwama	8	0
<b>TOTAL</b>	<b>26</b>	<b>9</b>

**Table 5**

Asked how respondents who had indicated that they were aware of the content material on the CASAS website came to know about this, 34.6% indicated that they had learnt of this from the Centre. Most of these were respondents from Nabweru. The variety of responses to this question are listed in Table 6. (*See Table 6*).

**If yes, how did you know? (Question 6b)**

	Nabweru	Nakaseke	Buwama	<b>TOTAL</b>
At the Centre	7	0	2	<b>9</b>
By a visiting Professor from South Africa and a team from Makerere University	1	0	0	<b>1</b>
CD Rom itself	0	0	1	<b>1</b>
I was at a computer	0	0	4	<b>4</b>
I saw it at the computer				
I saw it on the computer from the CD Rom				
From a CD Rom in a workshop	0	0	1	<b>1</b>

From a friend	0	0	1	<b>1</b>
It was given to us	0	3	0	<b>3</b>
It was provided to us by Prof. Prah	0	1	0	<b>1</b>
The one that was provided	0	1	0	<b>1</b>

**Table 6**

When the respondents were asked why they were not aware of the content material on the CASAS website, amongst those had indicated that they were not aware of this material on the website, one person in Nabweru indicated that he did not know how to use the computer. Obviously, this must be somebody who uses the Telecentre for other purposes like photocopying and telephoning and not accessing information on computer. Two persons from Nakaseke indicated that they had no information that the content materials were on the website. All three persons who either did not know how to use the computer and had no information that the content materials were on the website were male. (See Table 7).

**If no, why not? (Question 6c)**

	Nabweru	Nakaseke	Buwama	<b>TOTAL</b>
I do not know how to use the computer	1	0	0	<b>1</b>
Was not told	0	2	0	<b>2</b>

**Table 7**

When respondents were asked whether they were happy with what they have seen on the website, 72% indicated that they were very happy (Yes, very much so). Most of these were in Nakaseke and indeed, and indeed almost all of them were female. Statistically 52% of the total universe from the three Telecentres drawn from Nakaseke were very enthusiastic. Indeed, the whole sample from Nakaseke were very enthusiastic about the materials on the website. Only 30% of the respondents from Nabweru were very positive. 62% of the respondents

from Nabweru indicated that they were only partly satisfied with what they have seen. 44% in Nabweru were either very enthusiastic or slightly enthusiastic about what they found on the website. Respondents from Buwama were equally divided between those who were very enthusiastic and those who were a little enthusiastic.

**Are you happy with what you have seen? (Mark only one box) (Question 7)**

	Yes, very much so	Yes, a little	No, only partly	No, not at all
Nabweru	3	1	5	0
Nakaseke	19	0	0	0
Buwama	4	4	0	0
<b>TOTAL</b>	<b>26</b>	<b>5</b>	<b>5</b>	<b>0</b>

**Table 8**

None of the respondents in the 3 Telecentres suggested that they were not at all happy with what they saw. 5 Respondents from Nabweru have suggested that they were only partly happy. In sum, 85% of the total universe from the three Telecentres were either very enthusiastic or a little enthusiastic. These results register strong approval for the materials that have been posted on the website. (*See Table 8*).

When respondents were asked about problems they have found at the website (the respondents were requested to tick 2 of the most important problems found), 26.3% found the website difficult to access. 13.8% had difficulty understanding the materials. 23.6% were of the view that the print was too small, and 19.4% suggested that there was too little information. These findings are significant, since they point to the need to increase the amount of information offered for the topics covered on the website.

**What problems have you found? (Tick the 2 most important problems)**

(Question 8)

	Difficult to access	Have difficulty understanding	Print too small	Print too large	Too much colour	Too little colour	Too little information
Nabweru	3	3	7	0	0	0	4
Nakaseke	9	3	9	0	0	0	6
Buwama	7	4	1	1	0	0	4
<b>TOTAL</b>	<b>19</b>	<b>10</b>	<b>17</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>14</b>

**Table 9**

The responses also point to the need to simplify the accessibility, that is the entrance into the website. A fairly sizeable proportion had indicated that the print was too small. This obviously would need to be corrected. Those that have difficulty understanding the content material, apparently are people who have also literacy problems. (See Table 9).

Respondents were asked whether they find the information useful. 61% indicated that they found the information to be very useful. 33% found the information useful. Between the two categories, by implication 94% of the universe either find the information to be very useful or useful.

**Is the information useful? (Question 9)**

	Very useful	Useful	Only partly useful	Not at all useful
Nabweru	3	5	1	0
Nakaseke	16	2	0	0
Buwama	3	5	0	0
<b>TOTAL</b>	<b>22</b>	<b>12</b>	<b>1</b>	<b>0</b>

**Table 10**

This is a high percentage of approval of the usefulness of the materials. Nobody suggested that the information was not at all useful. Indeed, only 1 respondent indicated that the information was only partly useful. (See Table 10).

Respondents were asked to indicate which of the four texts of content materials was most useful (Question 10). 35.1% indicated that the material on the medicinal properties of the Neem tree was most useful. 27% pointed to HIV/AIDS. 24% suggested Soil Fertility and 13.5% indicated that the material on Insect Pest and Maize production were most useful.

For this question (Question 10) one of the respondents ticked more than one box. Therefore the total respondents for this question varied from the total for the other questions. Remarkably, all the respondents who regarded the information on the medicinal properties of the Neem tree were from Nakaseke. Nobody in Nakaseke found the information on Maize and Insect Pests as useful. For the rest the respondents were evenly divided. (*See Table 11*).

**Which of the four texts of information was most useful? (Question 10)**

	Neem	HIV	Soil Fertility	Insect Pests/Maize
Nabweru	0	3	2	4
Nakaseke	13	3	3	0
Buwama	0	4	4	1
<b>TOTAL</b>	<b>13</b>	<b>10</b>	<b>9</b>	<b>5</b>

**Table 11**

Respondents were asked how the content materials can be improved. The respondents were asked to indicate two ways in which this can be done. 56% suggested they would want more information put on the website. Nobody suggested that they wanted less information. 29.6% indicated that they would favour easier accessibility, while 11% required better meaning.

**How can the materials be improved? (indicate two) (Question 11)**

	More information	Less information	Easier accessibility	Better meaning	More attractive layout
Nabweru	8	0	7	2	0
Nakaseke	17	0	6	0	1
Buwama	5	0	3	4	1
<b>TOTAL</b>	<b>30</b>	<b>0</b>	<b>16</b>	<b>6</b>	<b>2</b>

**Table 12**

3.7% suggested that they would like to see a more attractive layout. Again the enthusiasm for more information was strongest in Nakaseke. Almost a third of the total universe would want the accessibility of the materials on the website to be improved. This is clearly a strong desire from the respondents which needs to be addressed. (*See Table 12*).

Respondents were asked to suggest what other type of information they would like to see placed on the website. A wide range of responses were elicited here.

**What sort of other information will you like to see on this website?**

(Question 12)

	Nabweru	Nakaseke	Buwama	<b>TOTAL</b>
Business Management	2	0	0	<b>2</b>
Governance	4	0	0	<b>4</b>
Information and Communication Techno	1	0	0	<b>1</b>
Traditional Medicine	1	0	0	<b>1</b>
Education	2	1	0	<b>3</b>



Livestock, prescriptions and dosage	1	0	0	<b>1</b>
Scholarships	1	0	0	<b>1</b>
Farming as a business	1	0	0	<b>1</b>
HIV prevention	1	0	0	<b>1</b>
Sports	3	0	0	<b>3</b>
Cultural issues	1	0	0	<b>1</b>
History and events	1	0	0	<b>1</b>
Health	5	10	0	<b>15</b>
Addiction and drug abuse	1	0	0	<b>1</b>
Agricultural Publications	1	4	0	<b>5</b>
Mulinga Tree	0	7	1	<b>8</b>
Better farming methods	0	5	0	<b>5</b>
Market Strategies	0	2	0	<b>2</b>
Adult Literacy Campaigns	0	1	0	<b>1</b>
Improvement of Self	0	1	0	<b>1</b>
Income related information	0	1	0	<b>1</b>
Poultry Farming	0	2	2	<b>4</b>
Pest Control	0	3	0	<b>3</b>

Piggery	0	1	0	<b>1</b>
Loan Projects	0	2	0	<b>2</b>
Distance education	0	1	0	<b>1</b>
Intensive agroforestry	0	1	0	<b>1</b>
Disease control	0	2	0	<b>2</b>
Dairy farming	0	1	0	<b>1</b>
Seedlings availability	0	1	0	<b>1</b>
Develpm. info. That can prevent poverty	0	1	0	<b>1</b>
Animal husbandry	0	1	0	<b>1</b>
Development	0	1	0	<b>1</b>
Tree planting	0	0	2	<b>2</b>
Soil fertility management	0	0	1	<b>1</b>
The spread & prevention of diseases	0	0	1	<b>1</b>
Beekeeping	0	0	1	<b>1</b>
Material that promote talents	0	0	1	<b>1</b>
Natural vegetation preservation	0	0	1	<b>1</b>
Mathematics translated into African languages	0	0	1	<b>1</b>
Teaching guide for people who want to learn African Languages	0	0	1	<b>1</b>

**Table 13**

Clearly the strongest area of concern of respondents is the area of health in general. If this category is linked to other suggestions like traditional medicine, HIV prevention, addiction and drug abuse, it makes health related matters the most prominent preoccupation of respondents. In Nakaseke information on the Mulinga tree is a matter of considerable concern. Otherwise, economic issues and production is the other area of great concern to the respondents. We have as far as possible represented the views of respondents as closely as possible to what they indicated. This is fully catalogued in *Table 13*.

When respondents were asked whether they would like getting such information in African languages, the enthusiasm was overwhelming.

**Do you like getting such information in African languages?** (Question 13a)

	Yes	No
Nabweru	9	0
Nakaseke	19	0
Buwama	8	0
<b>TOTAL</b>	<b>36</b>	<b>0</b>

**Table 14**

The level of enthusiasm is such that, it defies the myth that Africans in rural and peri-urban areas, mainly of the lower social classes want to have information and education in the colonial languages. (*See Table 4*).

The respondents were asked why they would like to get such information in African languages. Again, a rich and varied range of responses were registered. These are listed below.

**If yes, why?** (Question 13b)

***Nabweru***

- More people will visit the website
- Because of better understanding
- For easy understanding
- To learn more languages

- Easy to understand and disseminate
- I can read Luganda
- Dissemination becomes easier because some people can read in their local languages
- Local community can easily read printed local languages
- Because even our parents can manage to read like Luganda

***Nakaseke***

- Because I understand it better
- Understanding the concepts
- Best understood but also other languages
- Proud of my language
- Know it best
- My language – proud of it
- Understanding best
- More to access it in local languages
- Know my language best
- Understanding
- People understand better in their mother tongue
- The majority of people are illiterate. They thus need this information in African languages
- Easy to understand
- It's understood by many
- It's the language that is understandable
- It would benefit more people since the majority don't read English

***Buwama***

- Because they can be easily understood by so many people
- They are most understandable
- As they easier to understand and are familiar to society
- It's easy to understand
- It becomes easier to understand
- They are understandable
- For easy understanding
- African cultures are being promoted

**If no, why not? (Question 13c)**

- N/A

89% of the respondents were of the view that reading such texts as the

content material placed on the website helped to improve their reading and literacy skills. In Nabweru and Buwama this conviction was total.

**Does reading such texts improve your reading?** (Question 14a)

	Yes	No
Nabweru	9	0
Nakaseke	15	4
Buwama	8	0
<b>TOTAL</b>	<b>32</b>	<b>4</b>

**Table 15**

4 of the respondents in Nakaseke were not convinced that reading such materials on the website enhances their reading skills. (*See Table 15*).

Only 64% of the respondents regarded themselves as fully literate. In Buwama all the respondents regarded themselves as fully literate. Only a third of the respondents in Nabweru saw themselves as literate persons. In Nakaseke a little less than two-thirds of the respondents regarded themselves as fully literate. 10 out of the 13 respondents who indicated that they were not fully literate were females.

**Do you regard yourself as fully literate?** (Question 14b)

	Yes	No
Nabweru	3	6
Nakaseke	12	7
Buwama	8	0
<b>TOTAL</b>	<b>23</b>	<b>13</b>

**Table 16**

Discussions with staff of the Telecentres suggested that these indicators for literacy levels may be slightly exaggerated. This is on account of the fact that literacy is more or less a status symbol, and people with the

most rudimentary levels of literacy would want often to claim to be fully literate. (See Table 16).

All the respondents indicated that they would tell others about the information on the website.

This is certainly a welcome attitude which should encourage CASAS and the IDRC to develop more content materials for the Telecentres. (See Table 17).

**Will you tell others to access this website for information? (Question 15)**

	Yes	No
Nabweru	9	0
Nakaseke	19	0
Buwama	8	0
<b>TOTAL</b>	<b>36</b>	<b>0</b>

**Table 17**

Question 16 solicited views of respondents on the use to which access to the internet is put. A wide range of responses were obtained which are largely self-explanatory and which have been reproduced below. (See Table 18).

**What do most people who use the internet, use it for? (Question 16)**

	Nabweru	Nakaseke	Buwama	<b>TOTAL</b>
Sending letters and e-mails / commerce	1	4	1	<b>6</b>
Searching for information	4	1	0	<b>5</b>
To get more information technology	1	0	0	<b>1</b>
Searching for agricultural information	1	0	0	<b>1</b>
Education, health	1	0	1	<b>2</b>
Looking for sponsorship	3	1	0	<b>4</b>

Don't know	0	2	0	<b>2</b>
Leisure	0	2	0	<b>2</b>
The majority of the elite youth use it to access e-mail while some enjoy pornography. They are not aware of such information on the internet	0	1	0	<b>1</b>
To get educational materials and news	0	0	1	<b>1</b>
On Businesses	0	0	3	<b>3</b>
For surfing to get information for development	0	0	1	<b>1</b>
Research	0	0	1	<b>1</b>
International news	0	0	1	<b>1</b>

**Table 18**

All the respondents were convinced that the content material that has been produced will be helpful to the development endeavour.

**Will this material on CD Rom help development? (Question 17)**

	Yes	No
Nabweru	9	0
Nakaseke	19	0
Buwama	8	0
<b>TOTAL</b>	<b>36</b>	<b>0</b>

**Table 19**

This is an encouraging signal which should help justify the production of more content material. (*See Table 19*).

Responses to Question 18 provided important and telling information. All the respondents were of the view that the content materials indicated

to them that it is possible to present scientific materials in African languages.

**Do these materials prove to you that it is possible to present scientific materials in African languages?** (Question 18)

	Yes	No
Nabweru	9	0
Nakaseke	19	0
Buwama	8	0
<b>TOTAL</b>	<b>36</b>	<b>0</b>

**Table 20**

This level of conviction is important since it strenghtens the case for the production of educational materials in African languages for science and technological development in African educational systems. Again, it undermines the view that Africans generally do not want to acquire scientific and technological knowledge in their own languages. (*See Table 20.*)

Question 19 was an open-ended question directed to respondents in order to elicit candid opinion on any other issue they would want to express themselves on. A summary of these views are listed below. Most of the comments were actually a wish list of what they would like to see happen.

**Are there any other comments you would like to make?** (Question 19)

***Nabweru***

- Increase subjects on the CD Rom
- Farming as a business
- Moringa Tree
- Community based health, primary health care
- Improvement is needed on print out such that text is large enough to read
- Is there anyway of acquiring this information in printed format for free?



- Printed material, text must possibly be available at Telecentre for dissemination (free)
- Indicate authors of some articles and if possible their photographs

### *Nakaseke*

- Teach other languages e.g. English, Luo etc. (3)
- Piggery development
- Poultry
- Improving the cattle breeding (2)
- Improving on the educational standard
- Marketing techniques (4)
- Banking/microfinance institutions at Nakaseke (2)
- How to help orphans and widows
- Need to teach literacy and numeracy to the local population more
- Print the material and we take it home for our children to read for us
- Will continue learning and do not give up.
- Some ray of hope at last
- Give us more literacy programmes to help us access information since you will not provide sound accompaniment
- Keep on the spirit
- Keep on helping us
- Need a computer for rural centre
- To provide more materials related to health, agriculture and education (2)
- They should however avail it in printed format because people don't have computers
- More information to be availed in audio form
- People especially those who can access internet need to be informed of such information. It should be highlighted on popular websites like Yahoo, Hotmail etc. just like how news are highlighted. They may feel inquisitive to know what is available on the internet. Otherwise, without getting such information, they might not know that useful information is available on certain websites like CASAS
- They want to learn other languages in order to access information
- Knowledge on pig farming is needed
- Knowledge on poultry farming is needed
- How to improve cattle breeding
- Microfinance institutions
- Beneficial seeds like and Neem
- Marketing information be availed
- Information on pig rearing is needed

- Poultry farming information
- Cattle/animal drugs
- Printouts are needed
- Another telecentre in another location
- Let them help us have audio materials for those who can't read
- Improve on what has been done by being more elaborate
- It is vital for all people to access information for development
- Request for CD Rom on FAL (Function Adult Literacy)
- More information on health

### ***Buwama***

- Teach other languages e.g. English, Luo etc. (3)
- Piggery development
- Poultry
- Improving the cattle breeding (2)
- Improving on the educational standard
- Marketing techniques (4)
- Banking/microfinance institutions at Nakaseke (2)
- Orphans and widows helpless
- Need to teach literacy and numeracy to the local population more
- Print the material and we take it home for our children to read for us
- Will continue learning and do not give up.
- Some ray of hope at last
- Give us more literacy programmes to help us access information since you will not provide sound accompaniment
- Keep on the spirit
- Keep on helping us
- Need a computer for rural centre
- To provide more materials related to health, agriculture and education (2)
- They should however avail it in printed format because people don't have computers
- More information to be availed in audio form
- People especially those who can access internet need to be informed of such information. It should be highlighted on popular websites like Yahoo, Hotmail etc. just like how news are highlighted. They may feel inquisitive to know what is available on the internet. Otherwise, without getting such information, they might not know that useful information is available on certain websites like CASAS
- They want to learn other languages in order to access information
- Knowledge on pig farming is needed

- Knowledge on poultry farming is needed
- How to improve cattle breeding
- Microfinance institutions
- Beneficial seeds like the Neem
- Marketing information be availed
- Information on pig rearing is needed
- Poultry farming information
- Cattle/animal drugs
- Printouts are needed
- Another telecentre in another location
- Let them help us have audio materials for those who can't read
- Improve on what has been done by being more elaborate
- It is vital for all people to access information for development
- Request for CD Rom on FAL (Function Adult Literacy)
- More information on health

## **Responses from Telecentre Management**

### ***Telecentres***

#### ***Nabweru Telecentre Management***

As indicated earlier unstructured open-ended interviews were conducted with the Telecentre Management staff, and selected NGO staff in Kampala. A great deal of flexibility was used in these interviews. The Manager of the Nabweru Telecentre, Mr Geoffrey Kikomeko informed the evaluator that on a good day there would be between 25 and 30 users of the Telecentre. With a staff of 3 they are generally able to deal with issues affecting their work. The average income per day would be between 40 and 50 Ugandan shillings (about US\$30).

The main areas of activity include typesetting, designing, telephone use, computer training and photocopying. Currently, they use pre-paid facilities for phone calls. The Manager indicated that since the IDRC pulled out of the Telecentre it has been very difficult running the place because of problems of service provision. For two months there has been no telephone connection for their computers but there is a phone for those who want to make calls for payment.

#### *Buwama Telecentre Management*

In Buwama similar problems existed. One of the most remarkable developments in the area is that since the establishment of the IDRC Telecentre other private enterprise service facilities have emerged in the neighbourhood. The Manager of the Buwama Centre, Margaret Kulabako Nakirya, indicated that they are connected with the MTN but have no 'network' and are therefore only able to receive messages. This problem has been so since last year, 2001. Power fluctuations and surges have affected their computers. In short, the usage of computers for surfing the internet and transmitting e-mails has ground to a halt. They have been trying to get the local administration to assist them. Generally, there are between 15 and 20 people per day using their facilities but most of the facilities utilized are for photocopying, telephone calls, faxing and typesetting. There are always people trying to obtain services for free. During exam time they get many users of their facilities. Computer illiteracy is rife. The Centre is planning to establish a community radio and so they want to move to a place where they can have a studio for the radio and also have a better location.

Generally, the internet is expensive for the community, and since they are connected to the MTN they charge 300 shillings per minute for surfing. This is expensive. A simple e-mail costs 1000 shillings. On the average the Centre makes about 15 000 shillings per day. Because of competition from the newly emergent service facilities in the neighbourhood they have been forced to reduce the price of their photocopies from 100 shillings per page to 50 shillings. In comparison to the other service centres the Telecentre has much better computers but their location is not favourable. They provide video shows free of charge but unfortunately lack transport.

#### *Nakaseke Telecentre Management*

At Nakaseke the principal people the evaluator talked to were the Chairperson of the Steering Committee for the Centre, Mr Musa Luyinda and Carol Kamahoro who is Librarian/Information Officer. It

was indicated that there are on the average 10 – 12 people using ICT facilities. 20 – 30 people use the library and for the Business Unit there are about 30 people per day for photocopying, telephone calls and faxing facilities. They use the MTN system but it is expensive for most. Like in Buwama, they charged 500 shillings per minute for phone calls. Unfortunately the faxing facility was out of operation during the period of the visit. For photocopying they charge 100 shillings per page. The internet facility has been out of use for months, indeed, since the end of last year (2001).

When the Telecenter was visited on the first day, apparently a good number of the usual users of the computer facilities at the Centre were mobilized and had been informed about the arrival of the evaluation team. About 25 people were in attendance, made up almost exclusively of women. The enthusiasm was infectious and in our presence we had both a Lusoga and Luganda take turns in reading to us the same materials as they appear on the website. This was an educative exercise for all present because it demonstrated to the users the fact that it was possible to have one text read effectively by both Basoga and Baganda.

They raised an issue about having audio recorded tapes for those who are illiterate. It was explained to them that this will not enhance the literacy capacity of people. But, written pamphlets can be produced which duplicate the materials on the website so that the materials on the website are also available as hard copies in print. The point was firmly made to them that the website facilities should not be regarded as an alternative to literacy enhancement. It was emphasized that each person had to learn how to read.

The users present indicated that they are generally happy with the materials on the website. But a quick survey amongst them pointed to other topics and themes they would want to see presented on the website.

- How to grow matooke/plantain/'cooking bananas'
- How to control pests that affect tomatoes, matooke, cattle
- How to look after cattle, looking after poultry
- Other health topics like Malaria, pregnancy related topics (gynaecological problems and miscarriages)
- Tailoring and craft making

### **Responses from NGO Staff and Others Consulted**

#### *The World Conservation Union (IUCN)*

The evaluator had an extended visit to the Uganda Country Office of The World Conservation Union (IUCN). IUCN is a union of members who work together to achieve conservation of nature and sustainable utilisation of natural resources. This union began in 1948 as a group of scientists dedicated to the protection of nature. It has since evolved to become an international organisation that conserves nature through the activities of its members and partners – and is now called the World Conservation Union. The membership of IUCN currently includes over 900 organisations from 139 countries, including State Governments, government agencies and non-governmental organisations. The evaluator spoke at length to the Country Representative, Alex B. Muhweezi.

The representative indicated that their work involves conservation action and the sharing of ideas and lessons about conservation in the region and beyond. They develop tools for conservation, principally audio-visuals and translations. Amongst these, they have translated some government laws relating to conservation into African languages. They have also been producing TV and radio programmes broadcast in the local languages. One of their tasks is to capture indigenous knowledge on conservation. They generate and disseminate such materials. The Country Representative was of the view that jointly with CASAS it should be possible to cooperate in two specific areas. Firstly, materials on 'medicinal plants from wetlands'. Another would be on 'soil conservation'. The Country Representative also recommended that

it would be useful to contact the Regional Officer based in Nairobi, Mr Edmund Barrow.

*Traditional and Modern Health Practitioners Together Against AIDS and Other Diseases (THETA)*

A visit was also made to the offices of Traditional and Modern Health Practitioners Together Against AIDS and Other Diseases (THETA). This NGO is principally involved in combating HIV/AIDS. It was started in 1992 and has rapidly developed a strong and prominent profile as an NGO in the forefront of work against AIDS. Its approach is to find indigenous remedies against HIV/AIDS, principally herbal remedies. They stressed the combination of modern traditional answers to fight AIDS and other diseases. In our discussions with the Acting Director, Dr E.P.K Batiibwe, he indicated that THETA was fully aware of the issue of language and the need to develop materials in the languages of the masses. He suggested that it should be possible for CASAS and THETA to cooperate on the development of materials to support the fight against HIV/AIDS, produced principally for traditional healers.

THETA has enjoyed the moral and financial support of the government of Uganda through the Uganda AIDS Commission and Ministry of Health. The initial support from Swiss donor groups were vital for the initiation of the programme. THETA has also got financial support from the Rockefeller Foundation, Swiss Solidarity Chain, Pro-Victims Foundation, Department for International Development (DFID), Danish Development Assistance (DANIDA), United Nations Programme for HIV/AIDS (UNAIDS) and the World AIDS Foundation among others.

*Mako Herbalist Association (MAKOHA)*

The evaluator met with Mr Male Moses of the Mako Herbalist Association (MAKOHA) who are dealers in human and animal health, food preservation, consultancy and crop protection. They run herbal clinics in four districts of Uganda and have a coordination office in

Kampala, which coordinates work with indigenous knowledge practitioners countrywide. They train people in herbal medicine under which theme is included herbal medicine for humans and animals. They also develop materials for crop protection. They have been developing stabilisers for the even concentration of medicines. They work also in the development of flavouring and preservatives. They exchange views with community members to document their knowledge.

Mr Male made the point that “many people have knowledge but cannot express themselves in English. Such people express their ideas in their own languages. It therefore makes a great deal of sense for us to use African languages. When I go to Karamoja and Acholi and speak their language they open up and are happy to cooperate.”

The staff from MAKOHA expressed their wish to cooperate with CASAS to produce content materials on the basis of the new orthographies that are being developed. This would make their information and materials easier to market. They indicated also that they would appreciate help in the publication of some of the materials they already have. They have 36 different sets of materials on medicinal plants and have documented their efficacy in disease treatment. They have four different materials on preservatives and six on animal health.

#### *Uganda Development Services (UDS)*

CASAS also spoke to the Project Manager of Uganda Development Services (UDS), Ritah Mukaaka Mijumbi. The Uganda Development Services is an NGO promoting development through information sharing and technical empowerment. Practically this means that they build capacity for local community based organisations to improve service and information delivery. They ICTs to deliver and share information through their Library and Information Resource Unit, a computer training service and information dissemination to target groups which are mainly farmers, women and youth. The Project



Manager indicated that it would be possible and useful for CASAS and the UDS to cooperate on subject areas of common interests and other cross-cutting issues. The cooperation could focus on information production and dissemination. Ms Mijumbi indicated that “everybody wants materials in their own languages, this is already stalling the wider use of the CD”. We discussed this matter and agreed that the harmonization approach is the most economically rational way of dealing with the problem.

*Council for Economic Empowerment of Women of Africa (CEEWA)*

A very good discussion took place in the offices of the Council for Economic Empowerment of Women of Africa (CEEWA). This NGO is a chapter of a regional body that was formed in 1995. CEEWA was initiated at the NGO forum that was held in 1994, prior to the Beijing Conference. CEEWA was created to articulate regional and country specific strategies to address the causes of poverty and lack of economic empowerment for women in Africa. CEEWA-Uganda is a non-governmental, non-profit organisation whose mission is to promote economic empowerment of women in the development process through advocacy, training, research and documentation.

In the discussion with the Project Manager – ICTs, Zavuga Goretti, the view was expressed that there is scope for cooperation between CASAS and CEEWA in the production of content material relating to the economic empowerment of women and the problems of accessing control of economic resources for women. She indicated that indeed some of the materials could be shared between their country offices in South Africa, Kenya, Uganda, Zambia and Senegal, although, each country principally focuses on slightly different things.

*Uganda AIDS Commission (UAC)*

A morning of discussions was held at the Uganda AIDS Commission offices in Mengo, principally with the Librarian/Documentalist, Rosemary Kabugo. The UAC is the principal coordinating body for all

HIV/AIDS activities in Uganda. They gather documentation, store, disseminate HIV/AIDS combating materials in and out of the country, through partners. The UAC is mainly a depository centre. They do not primarily develop materials. A lot of materials which they gather and give to the public are in English. Very few materials are in local languages. There is a great need for a uniform strategy for the development of materials in African languages. CASAS, in their estimation, would be a good partner in this work.

*Natural Chemo-therapeutics Research Laboratory, Ministry of Health*

This organisation operates not as an NGO but as a research unit of the Ministry of Health of the Ugandan Government. It was originally established in 1963 to examine the possibilities of producing chemo-therapeutic products, these include principally pain killers and anti-malaria products. Over the years, it has produced and acquired a great deal of documentation in this field. During the 1970s and 1980s, much of its documentation and facilities were destroyed. Since 1996, under this new regime things are picking up again.

Anti-malaria work is currently the most prominent area of activity. Eight different plants are used for the development of anti-malaria products. These have been found to be, to different degrees, capable of fighting parasites resistant to the common mainstream treatment for malaria. Dr Grace Nambatya Kyeyune, Acting Director of Research informed the evaluator that cooperation with CASAS and the IDRC in developing content material and literature in African languages will go a long way towards facilitating delivery of their products.

**Expert Assessment of Content Materials (By Language Specialists)**

***Runyakitara***

1. There is a mix-up of Runyoro Rutooro and Runyankore Rukiga. Is there a way as to how this could have been avoided? The two dialects have always been separate.

2. The orthography is not very good. In the Runyoro Rutooro dominated texts, Runyankore Rukiga speakers might think that some of the words are not well spelt and vice versa. This makes the CD Rom too academic.
3. There are some few words, which should be corrected. Their spelling is not correct.

However, the CD Rom is good and if well used, it can bring some good results. Are there any chances of having the CD Rom written in pamphlets? This is because the majority of Ugandans do not have computers. Even a bigger section of the educated people in this country are not computer literate. They are materials which are publishable. I congratulate you on this noble cause of bringing Runyakitara dialects together.

***Luo (Aholi/Lango)***

1. Not much attention was paid to the verb forms in the infinitive. Most C<sub>2</sub> of the infinitive verb forms should be doubled, e.g. “Pimmo” not “Pimmo”, “Yubbo” not “yubo”, “Cakko” not “cako”, “Kello” not “Kelo”, etc.
2. Possessive pronominal suffixes should be separated from the main noun by the use of hyphen, e.g. “Kom-gi” not Komgi and “Kwo-gi” not Kwogi
3. In the section “Angeyo (Angeo) mining ni atye Kede Two Jonyo?”
  - a. Paragraph 2 last sentence should be either “wek(me)”, or “(me) wek”
  - b. Paragraph 3 “Dano ame tamo ni” not “dano ame tamo nyo”
4. CASAS Luo 3
  - Apirika not Africa
  - Still the problem is in the verb form in the infinitive and the pronominal affixation.

CASAS Luo 4

- The only problem is in the infinitive verb forms. They lack the necessary C<sub>2</sub> gemination.

CASAS Luo 5

- As in Luo 4.

***Luganda/Lusoga***

General Impression. Points worth mentioning

1. The translation is fairly good i.e. in terms of content and its usefulness to the majority of Luganda/Lusoga speakers who cannot understand English properly.
2. The themes translated meet the needs of the intended audience, since for example AIDS, agriculture are some of the topical issues discussed in our society today.
3. The format is o.k. except that some of the pictures are faint.

However, I should also draw your attention to the following:

*a. Orthography*

There are numerous typographical errors that need to be corrected.

*b. Lack of consistence*

Whereas many Ugandan languages have not developed specialized terminologies, the translators would have laboured to stick to one word for a particular concept. For example, adapting words like *Mukenenya*, *siriimu* and *akawuka* all meaning AIDS creates unnecessary inconsistencies.

*c. Literal Translation*

The translators resorted to direct translation, which in some particular circumstances makes the translation sound not natural to native speakers. For example, the term *Abalimi abato* does not communicate the intended meaning of the original text, which I

guess was *Small-scale farmers*.

*d. Wrong Exegesis*

Some words were wrongly interpreted. For example, the term plant does mean *ebimera* but rather *ebirime*.

*e. Transparency*

Some statements have double meaning, which could be confusing to the reader.

- I am not very satisfied that there is such a high degree of relatedness between Luganda and Lusoga. I have a feeling that the Lusoga person might have had enough exposure to Luganda. Will the native speakers with less or no exposure at all be able to understand?
- Is it possible to have this literature published in booklets, brochures/pamphlets etc.?

***Ateso/Karimojong***

A very good CD Rom. It is the information our people need in these times of reconstruction. A commendable job at harmonizing Ateso and Karimojong.

Areas of Improvement:

1. The harmonization of Ateso and Karimojong was not followed to the very end. There is need to continue this throughout the product otherwise the document is  $\frac{3}{4}$  Ateso but quite mutually intelligible to Karimojong audience.
2. need to address drought fighting methods
  - damming
  - farming
  - etc. cattle breeding/farming etc.

3. Accessibility of the CD Rom to an average Etesot and Karmojong is remote. Make prints on booklets, pamphlets, brochures, etc.

#### ***Acacia Coordinator***

1. Content is educative and quite relevant to our local communities.
2. Appreciate your solution of solving illiteracy by encouraging people to read. Will still need a guide whatever subject area it is. It still needs the basics of literacy (basic reading skills before they can start). This assumes people already know how to read.
3. Maybe as we overcome the problem in no. 2, explore making it more illustrative so that as they read, the illustrations depict the activities involved.

#### **Conclusions and Recommendations**

We can in conclusion say that the overall reception of the pilot content material on CD Rom which appears on the CASAS website ([www.casas.co.za](http://www.casas.co.za)) has been well received. The overwhelming majority of people who have seen it from within the user community have reacted favourably to the materials. But a good part of them would like to see improvements by way of larger font size and more and better illustrations.

We are happy to report that the general thumbs up which has been given to what has been produced is most encouraging. The evaluation has also drawn attention to various aspects of the work and the product which would need to be improved in our subsequent work in the development of content materials.

The lessons of the process of production, and the product, were in part received fairly early in the history of this project, and has been summarised as lessons of Phase I in this document. We reproduce them here for purposes of recall

The two most important lessons that were noted in the process of developing the pilot CD Rom were that:

1. It is important to see the linguistic aspects of the work as technically the most complex in the process. A considerable amount of effort needs to be put into translating technical scientific terms into African languages. This needs a great deal of care. The selection and collection of content material, per se, is not the most tricky aspect of the work.
2. In order to take the maximum advantage out of the product, voice injections into the product need to be kept to a minimum, so that the users are forced to practice and improve their literacy/reading skills as they at the same time acquire crucial knowledge and information provided by the CD Rom. The need to avoid voice injections is also underscored by the fact that many speech forms within a cluster of mutually intelligible dialects have often fairly distinct phonetical and phonological characteristics which people identify with ethnicity. The reaction of the user will then be to say 'but, this is not in my language'. If the presentation is overwhelmingly textual and can be read across as many dialectical boundaries as possible within a cluster of mutually intelligible speech forms, using the CASAS approach to orthographic harmonization, this makes better economic, social and cultural sense. Very importantly, it also enhances the literacy skills of the user.

Point 1 in the above brings out the fact that the harmonisation and standardisation of mutually intelligible dialects within a cluster needs to be completed before the production of content materials. Otherwise, the prospective speech community which can be reached becomes limited. On the economies of scale, the logic of this is clear, if we can produce content materials which will reach 3 million people, that is better than producing content material for 1 million people. The views of the experts recorded in the section *Expert Assessment of Content Materials*

(see above), indicate clearly that the orthographic solutions offered in this pilot product falls far short of perfect. This underscores even further the need to undertake a more comprehensive harmonisation and standardisation process.

As suggested in Point 1 the selection and collection of content material *per se* is not a particularly difficult aspect of the work. It is more the technical translation after harmonisation of the orthography has been achieved, which is crucial to the ultimate success of the product.

Point 2 in the above draws attention to the fact that, the use of voice injections has an immediate and direct way of identifying the content material with a given dialect which may be mutually intelligible with a range of other dialects within a cluster of mutually intelligible dialects. This point came out clearly during the survey, particularly at Nakaseke, where a good number of the users were initially insisting on having separate Lusoga and Luganda versions.

When it became clear to them, through demonstration, that they could read the same text and pronounce what they read with their own dialectal inflections, the point became clearer. Economically it makes little sense in trying to produce separate CD Roms for each dialect. This would not only be economically unsustainable but sociologically divisive.

During the survey it became clear that the successful usage of content materials on the internet is crucially dependant on the acquisition of literacy skills by the users. The use of content materials will be constrained for as long as a good part of the user-community is illiterate. It is therefore useful to provide printed copies of the content materials for users. Since only a few users can have access to computers at any point in time, literature which can be taken home, and which can be read at leisure is crucial for the development and enhancement of literacy skills.



An important finding in the evaluation exercise is that a much wider range of content materials are of interest to the user communities. There is therefore the need to respond to these requests in the production of subsequent content materials. The selection process of content materials should therefore reflect the interests articulated by the user-communities.

The various NGOs consulted indicated clearly, without exception, that they would welcome a cooperative approach to the production of content materials. It would therefore be useful in subsequent work to draw the interests and the work of the NGOs more actively into the production of content materials.

The Telecentres surveyed appear to be going through a difficult patch. The problem of telephone linkage appears to be particularly problematic. Without this linkage it is not possible to get on to the internet and therefore frustrates the whole purpose of producing content materials on the world-wide-web. This further underscores also the need to back up content materials on the web with literature in hard copies.

With efficient management, clearly, these Telecentres should be sustainable. There may be a need to monitor the progress of Telecentres and provide some support for some more time in order to ensure their survival and justify the resources that have already been expended on them.

It is recommended that:

1. Content materials in the areas identified by the user communities and the NGOs be used as a basis for the development of more content materials which are economically and socially relevant to the user communities.

2. Parallel literature should be produced for all the content materials that are developed.
3. The harmonisation and standardisation of speech forms within mutually intelligible clusters should be completed as the first step before the production of new content materials.
4. The establishment of other Telecentres outside the Luganda speaking areas of Uganda is crucial if we are to avoid being accused of partiality in the provision of resources and infrastructure for ICT work.
5. The next round of content material production should be undertaken while the enthusiasm exists amongst the different stake holders.
6. An evaluation is strongly recommended after the next set of products are made.

## Appendices

### Questionnaire

#### **CASAS / IDRC ACACIA PROJECT EVALUATION QUESTIONNAIRE (Users Questionnaire)**

1. Name.....
2. Age.....
3. Occupation.....
4. Sex: 

<input type="checkbox"/>
<input type="checkbox"/>

 Male  
Female
5. Which is your home language (tick appropriate box)  

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

 Acholi/Lango  
Luganda/Lusoga  
Ateso/Karimojong  
Runyakitara  
Other
6. a) Are you aware of the CD Rom on the CASAS website?  

<input type="checkbox"/>
<input type="checkbox"/>

 Yes  
No  
b) If yes, how did you know?  
.....  
c) If no, why not?  
.....

7. Are you happy with what you have seen? (Mark only one box)

<input type="checkbox"/>	Yes, very much so
<input type="checkbox"/>	Yes, a little
<input type="checkbox"/>	No, only partly
<input type="checkbox"/>	No, not at all

8. What problems have you found? (Tick the 2 most important problems)

<input type="checkbox"/>	Difficult to access
<input type="checkbox"/>	Have difficulty understanding
<input type="checkbox"/>	Print too small
<input type="checkbox"/>	Print too large
<input type="checkbox"/>	Too much colour
<input type="checkbox"/>	Too little colour
<input type="checkbox"/>	Too little information

9. Is the information useful?

<input type="checkbox"/>	Very useful
<input type="checkbox"/>	Useful
<input type="checkbox"/>	Only partly useful
<input type="checkbox"/>	Not at all useful

10. Which of the four texts of information was most useful?

<input type="checkbox"/>	Neem
<input type="checkbox"/>	HIV
<input type="checkbox"/>	Soil Fertility
<input type="checkbox"/>	Insect Pests / Maize

11. How can the materials be improved? (indicate two)

<input type="checkbox"/>	More information
<input type="checkbox"/>	Less information
<input type="checkbox"/>	Easier accessibility

- ☐ Better meaning
- ☐ More attractive layout

12. What sort of other information will you like to see on this website?
- a) .....
- b) .....
- c) .....
13. a) Do you like getting such information in African languages?
- ☐ Yes
- ☐ No
- c) If yes, why?
- .....
- d) If no, why not?
- .....
14. a) Does reading such texts improve your reading?
- ☐ Yes
- ☐ No
- b) Do you regard yourself as fully literate?
- ☐ Yes
- ☐ No
15. Will you tell others to access this website for information?
- ☐ Yes
- ☐ No

16. What do most people who use the internet, use it for?

.....

17. Will this material on CD Rom help development?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

18. Do these materials prove to you that it is possible to present scientific materials in African languages?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

19. Are there any other comments you would like to make?

.....

.....

.....

.....

.....

**c) List of Agencies/NGO's Consulted**

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